

***** Welcome to STN International *****

<u>NEWS 1</u>		Web Page for STN Seminar Schedule - N. America
<u>NEWS 2</u>	APR 02	CAS Registry Number Crossover Limits Increased to 500,000 in Key STN Databases
<u>NEWS 3</u>	APR 02	PATDPAFULL: Application and priority number formats enhanced
<u>NEWS 4</u>	APR 02	DWPI: New display format ALLSTR available
<u>NEWS 5</u>	APR 02	New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes
<u>NEWS 6</u>	APR 02	EMBASE Adds Unique Records from MEDLINE, Expanding Coverage back to 1948
<u>NEWS 7</u>	APR 07	50,000 World Traditional Medicine (WTM) Patents Now Available in CAPlus
<u>NEWS 8</u>	APR 07	MEDLINE Coverage Is Extended Back to 1947
<u>NEWS 9</u>	JUN 16	WPI First View (File WPIFV) will no longer be available after July 30, 2010
<u>NEWS 10</u>	JUN 18	DWPI: New coverage - French Granted Patents
<u>NEWS 11</u>	JUN 18	CAS and FIZ Karlsruhe announce plans for a new STN platform
<u>NEWS 12</u>	JUN 18	IPC codes have been added to the INSPEC backfile (1969-2009)
<u>NEWS 13</u>	JUN 21	Removal of Pre-IPC 8 data fields streamline displays in CA/CAPlus, CASREACT, and MARPAT
<u>NEWS 14</u>	JUN 21	Access an additional 1.8 million records exclusively enhanced with 1.9 million CAS Registry Numbers -- EMBASE Classic on STN
<u>NEWS 15</u>	JUN 28	Introducing "CAS Chemistry Research Report": 40 Year of Biofuel Research Reveal China Now Atop U.S. in Patenting and Commercialization of Bioethanol
<u>NEWS 16</u>	JUN 29	Enhanced Batch Search Options in DGENE, USGENE, and PCTGEN
<u>NEWS 17</u>	JUL 19	Enhancement of citation information in INPADOC databases provides new, more efficient competitor analyses
<u>NEWS 18</u>	JUL 26	CAS coverage of global patent authorities has expanded to 61 with the addition of Costa Rica
<u>NEWS 19</u>	SEP 15	MEDLINE Cited References provide additional relevant records with no additional searching.
<u>NEWS 20</u>	OCT 04	Removal of Pre-IPC 8 data fields streamlines displays in USPATFULL, USPAT2, and USPATOLD.
<u>NEWS 21</u>	OCT 04	Precision of EMBASE searching enhanced with new chemical name field
<u>NEWS 22</u>	OCT 06	Increase your retrieval consistency with new formats for Taiwanese application numbers in CA/CAPlus.
<u>NEWS 23</u>	OCT 21	CA/CAPlus kind code changes for Chinese patents increase consistency, save time
<u>NEWS 24</u>	OCT 22	New version of STN Viewer preserves custom highlighting of terms when patent documents are saved in .rtf format
<u>NEWS 25</u>	OCT 28	INPADOCDB/INPAFAMDB: Enhancements to the US national patent classification.
<u>NEWS 26</u>	NOV 03	New format for Korean patent application numbers in CA/CAPlus increases consistency, saves time.

NEWS 27 NOV 04 Selected STN databases scheduled for removal on
December 31, 2010

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,
AND CURRENT DISCOVER FILE IS DATED 07 JULY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN customer
agreement. This agreement limits use to scientific research. Use
for software development or design, implementation of commercial
gateways, or use of CAS and STN data in the building of commercial
products is prohibited and may result in loss of user privileges
and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 16:32:28 ON 15 NOV 2010

=> file embase medline biosis biotechds ca caba caplus lifesci scisear	
COST IN U.S. DOLLARS	SINCE FILE TOTAL
	ENTRY SESSION
FULL ESTIMATED COST	0.22 0.22

FILE 'EMBASE' ENTERED AT 16:33:18 ON 15 NOV 2010
Copyright (c) 2010 Elsevier B.V. All rights reserved.

FILE 'MEDLINE' ENTERED AT 16:33:18 ON 15 NOV 2010

FILE 'BIOSIS' ENTERED AT 16:33:18 ON 15 NOV 2010
Copyright (c) 2010 The Thomson Corporation

FILE 'BIOTECHDS' ENTERED AT 16:33:18 ON 15 NOV 2010
COPYRIGHT (C) 2010 THOMSON REUTERS

FILE 'CA' ENTERED AT 16:33:18 ON 15 NOV 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CABA' ENTERED AT 16:33:18 ON 15 NOV 2010
COPYRIGHT (C) 2010 CAB INTERNATIONAL (CABI)

FILE 'CAPLUS' ENTERED AT 16:33:18 ON 15 NOV 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'LIFESCI' ENTERED AT 16:33:18 ON 15 NOV 2010
COPYRIGHT (C) 2010 Cambridge Scientific Abstracts (CSA)

FILE 'SCISEARCH' ENTERED AT 16:33:18 ON 15 NOV 2010
Copyright (c) 2010 The Thomson Corporation

FILE 'CONFSCI' ENTERED AT 16:33:18 ON 15 NOV 2010
COPYRIGHT (C) 2010 Cambridge Scientific Abstracts (CSA)

FILE 'AGRICOLA' ENTERED AT 16:33:18 ON 15 NOV 2010

```
=> s neisseria group B
L1      24 NEISSERIA GROUP B

=> s neisseria (10a) group B
L2      2871 NEISSERIA (10A) GROUP B

=> s l2 and (vaccine or bactericidal or microbicidal or bacteriocidal)
L3      1484 L2 AND (VACCINE OR BACTERICIDAL OR MICROBICIDAL OR BACT
      L)

=> s l3 and bactericidal
L4      620 L3 AND BACTERICIDAL

=> s l4 and (MenB919 or MenB 929)
L5      0 L4 AND (MENB919 OR MENB 929)

=> s l4 and (MenB919 or MenB 919)
L6      0 L4 AND (MENB919 OR MENB 919)

=> s l4 and neisseria (5a) antigen?
```

5 FILES SEARCHED...

7 FILES SEARCHED...

```
L7      76 L4 AND NEISSERIA (5A) ANTIGEN?
```

```
=> dup rem l7
```

PROCESSING COMPLETED FOR L7

```
L8      29 DUP REM L7 (47 DUPLICATES REMOVED)
```

```
=> d bib ab i-29
```

```
L8      ANSWER 1 OF 29  CA  COPYRIGHT 2010 ACS on STN      DUPLICATE 1
```

	Full Text	Citing References
AN	152:343487	CA
TI	Outer membrane vesicle (OMV) vaccine comprising protein NMB0964 f Neisseria meningitidis	
IN	Bos, Martine Petronella; Poolman, Jan; Stork, Michiel; Tommassen, Petrus Maria; Weynants, Vincent	
PA	GlaxoSmithKline Biologicals S.A., Belg.; Utrecht University	
SO	PCT Int. Appl., 43pp. CODEN: PIXXD2	
DT	Patent	
LA	English	
FAN.CNT	1	

	PATENT NO.	KIND	DATE	APPLICATION NO.	DAT
FI	<u>WO 2010025964</u>	A1	20100311	<u>WO 2009-EP52689</u>	200
	W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, B CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, E FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, J KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, M ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, P PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, S TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, H IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, S SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, N TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, U ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	<u>AU 2008267307</u>	A1	20081231	<u>AU 2008-267307</u>	200
	<u>AU 2009217425</u>	A1	20100325	<u>AU 2009-217425</u>	200
PRAI	<u>GB 2008-16447</u>	A	20080908		
	<u>WO 2009-EP52689</u>	W	20090306		

AB The present invention relates to immunogenic compns. comprising n blebs with upregulated levels of the NMB0964 antigens such that **bactericidal** antibodies are generated against said antigen. It h found for the first time that this antigen's expression is zinc r and therefore methods are provided to upregulated expression thro removal of the zinc repression mechanism of the cell or promoter, through removal of zinc from the culture medium.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 29 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN

Full
Text

DUPLICATE 2

AN 2010-08367 BIOTECHDS

TI Design and evaluation in mice of a broadly protective meningococ B native outer membrane vesicle **vaccine**;

therapeutic composition comprising outer membrane vesicle **vac** containing synX, IpxL1 and IgtA gene disabled *Neisseria meningitidis* useful as **vaccine** for treatment and prevention of meningitis

AU ZOLLINGER WD; DONETS MA; SCHMIEL DH; PINTO VB; LABRIE JE; MORAN BRANDT BL; IONIN B; MARQUES R; WU M; CHEN P; STODDARD MB; KEISER

CS WRAIR

LO Zollinger WD, WRAIR, Div Bacterial and Rickettsial Dis, 503 Robe Ave, Silver Spring, MD 20910 USA

SO VACCINE; (2010) 28, 31, 5057-5067 ISSN: 0264-410X

DT Journal

LA English

AB AUTHOR ABSTRACT - A **vaccine** based on native outer membrane vesic (NOMV) that has potential to provide safe, broad based protectio **group B** strains of *Neisseria meningitidis* has been developed. Th **antigenically** diverse **group B** strains of *N. meningitidis* were chosen and genetically modified to improve safety and expression desirable antigens. Safety was enhanced by disabling three genes IpxL1, and IgtA. The **vaccine** strains were genetically configured

have three sets of antigens each with potential to induce protective antibodies against a wide range of group B strains. Preliminary immunogenicity studies with combined NOMV from the three strains confirmed the capacity of the **vaccine** to induce a broad based **bactericidal** antibody response. Analysis of the **bactericidal** act indicated that antibodies to the LOS were responsible for a major of the **bactericidal** activity and that these antibodies may enhance **bactericidal** activity of anti-protein antibodies. (C) 2010 Elsevier Ltd. All rights reserved. (11 pages)

L8 ANSWER 3 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 3

Full Text	Citing References
AN 152:141980 CA	
TI Immunoproteomic analysis of the development of natural immunity in subjects colonized by Neisseria meningitidis reveals potential vaccine candidates	
AU Williams, Jeannette N.; Skipp, Paul J.; O'Connor, C. David; Christodoulides, Myron; Heckels, John E.	
CS Molecular Microbiology, Division of Infection, Inflammation and Immunology, Southampton General Hospital, University of Southampton Medical School, Southampton, SO16 6YD, UK	
SO Infection and Immunity (2009), 77(11), 5080-5089	
PB American Society for Microbiology	
DT Journal	
LA English	
AB The potential protective effect of existing vaccines against serogroup B meningococci, based on outer membrane proteins, is limited by strain restriction and apparent short duration of immune responses. In meningococcal colonization is known to stimulate the production of cross-protective antibodies as defined by the development of serum bactericidal activity (SBA) against heterologous serogroup B strains. In the current study, a resource of human serum samples and meningococcal carriage strains from studies of longitudinal carriage has been used to immunoproteomic analysis to investigate the outer membrane protein antigens associated with the development of SBA to both homologous and heterologous meningococcal serogroup B strains. Proteins from outer membranes of homologous and heterologous strains were separated by two-dimensional electrophoresis and reacted with paired sera which showed an increase in SBA following colonization. Individuals showed different patterns of reactivity upon colonization, with an increase in SBA associated with increases in the number of spots detected before and after colonization and/or with increases in the intensity of individual spots. Analysis of immunoreactive spots by mass spectrometry resulted in the identification of 43 proteins potentially associated with the development of SBA against both homologous and heterologous strains. The list of immunogens generated included not only well-established antigens but also novel proteins that represent potentially new candidates for inclusion in defined, multicomponent serogroup B vaccines.	
OSC.G 3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITATIONS)
RE.CNT 60	THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD (60 CITATIONS AVAILABLE IN THE RE FORMAT)

L8 ANSWER 4 OF 29 CA COPYRIGHT 2010 ACS on STN

DUPLICATE 4

Full Text	Citing References
AN 153:171656 CA	
TI Neisseria meningitidis antigen NMB0088: sequence variability, pro topology and vaccine potential	
AU Sardinias, Gretel; Yero, Daniel; Climent, Yanet; Caballero, Evelin Karem; Niebla, Olivia	
CS Meningococcal Research Department, Division of Vaccines, Center f Genetic Engineering and Biotechnology, Havana, 10600, Cuba	
SO Journal of Medical Microbiology (2009), 58(2), 196-208	
CODEN: JMMIAV; ISSN: 0022-2615	
PB Society for General Microbiology	
DT Journal	
LA English	
AB The significance of Neisseria meningitidis serogroup B membrane p as vaccine candidates is continually growing. Here, the authors different aspects of antigen NMB0088, a protein that is abundant outer-membrane vesicle preps. and is thought to be a surface pro The gene encoding protein NMB0088 was sequenced in a panel of 34 meningococcal strains with clin. and epidemiol. relevance. After anal., four variants of NMB0088 were identified; the variability confined to three specific segments, designated VR1, VR2 and VR3. Secondary structure predictions, refined with alignment anal. and modeling using FadL of Escherichia coli, revealed that almost all variable regions were located in extracellular loop domains. In the NMB0088 antigen was expressed in E. coli and a procedure for purified recombinant NMB0088 is described. The humoral immune re elicited in BALB/c mice was measured by ELISA and Western blottin the functional activity of these antibodies was detd. in a serum bactericidal assay and an animal protection model. After immuniz in mice, the recombinant protein was capable of inducing a protec response when it was administered inserted into liposomes. Accor the authors' results, the recombinant NMB0088 protein may represe novel antigen for a vaccine against meningococcal disease. Howe results from the variability study should be considered for desig cross-protective formulation in future studies.	
OSC.G 3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITI
RE.CNT 55	THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 29 CA COPYRIGHT 2010 ACS on STN

DUPLICATE 5

Full Text	Citing References
AN 149:126525 CA	
TI Sequences of Neisseria ORF2086 proteins as immunogenic compositio the prevention and treatment of meningococcal disease	
IN Zlotnick, Gary W.	
PA Wyeth, John, and Brother Ltd., USA	
SO PCT Int. Appl., 124pp.	
CODEN: PIXXD2	
DT Patent	
LA English	
FAN.CNT 1	

	PATENT NO.	KIND	DATE	APPLICATION NO.	DAT
FI	<u>WO 2008079372</u>	A2	20080703	<u>WO 2007-US26238</u>	200
	<u>WO 2008079372</u>	A9	20090212		
	<u>WO 2008079372</u>	A3	20090416		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, B CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, E GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, K KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, M MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, P PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, T TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, H IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, T BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, T GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, A BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	<u>AR 64642</u>	A1	20090415	<u>AR 2007-105809</u>	200
	<u>AU 2007338690</u>	A1	20080703	<u>AU 2007-338690</u>	200
	<u>CA 2673515</u>	A1	20080703	<u>CA 2007-2673515</u>	200
	<u>EP 2094294</u>	A2	20090902	<u>EP 2007-853461</u>	200
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, H IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, S				
	<u>JP 2010512792</u>	T	20100430	<u>JP 2009-542957</u>	200
	<u>MX 2009006760</u>	A	20090820	<u>MX 2009-6760</u>	200
	<u>CN 101631858</u>	A	20100120	<u>CN 2007-80047494</u>	200
	<u>IN 2009DN04182</u>	A	20100402	<u>IN 2009-DN4182</u>	200
FRAI	<u>US 2006-876486P</u>	P	20061222		
	<u>WO 2007-US26238</u>	W	20071221		

AB The present invention relates to Neisseria ORF2086 proteins, cross immunogenic proteins which can be isolated from neisserial strain prep. recombinantly, including immunogenic portions thereof, bio thereof, antibodies that immunospecifically bind to the foregoing nucleic acid sequences encoding each of the foregoing, as well as of same in immunogenic comps. that are effective against infecti Neisseria meningitidis serogroup B. A Neisserial membrane protein capable of eliciting **bactericidal** antibodies against heterologous strains was identified. Recombinant lipidated protein ORF2086 (R) was cloned and purified. Antiserum against meningococcal strains produced.

L8 ANSWER 6 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 6

Full Text [Citing References](#)

AN 149:87223 CA

TI A comparison of anionic nanoparticles and microparticles as **vaccine** delivery systems

AU Wendorf, Janet; Chesko, James; Kazzaz, Jina; Ugozzoli, Mildred; V Michael; O'Hagan, Derek; Singh, Manmohan

CS Novartis Vaccines and Diagnostics, Inc., Emeryville, CA, USA

SO Human Vaccines (2008), 4(1), 44-49

CODEN: HVUAAK; ISSN: 1554-8600

PB Landes Bioscience

DT Journal

LA English

AB The objective of this work was to conduct an in vivo comparison of nanoparticles and microparticles as **vaccine** delivery systems. Poly(lactide-co-glycolide) (PLG) polymers were used to create nanoparticle size 110 nm and microparticles of size 800-900 nm. Protein antigen then adsorbed to these particles. The efficacy of these delivery was tested with two protein antigens. A recombinant **antigen** from **Neisseria meningitidis** type B (MenB) was administered i.m. (i.m.) intraperitoneally (i.p.). An antigen from HIV-1, env glycoprotein was administered intranasally (i.n.) followed by an i.m. boost. In three studies, there were no differences between the nanoparticle microparticles formulations. Both particles led to comparable immune responses in mice. The immune responses for MenB (serum **bactericidal** activity and antibody titers) were equiv. to the control of aluminum hydroxide. For the gp140, the LTK63 was necessary for high titer nanoparticles and microparticles are promising delivery systems.

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITI
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 7

Full Text	Citing References
AN 147:116458 CA	
TI Vaccines for use in Neisseria meningitidis infection	
IN Tang, Christoph Marcel; Li, Yanwen	
PA Imperial Innovations Limited, UK	
SO PCT Int. Appl., 25 pp.	
CODEN: PIXXD2	
DT Patent	
LA English	
FAN.CNT 2	

	PATENT NO.	KIND	DATE	APPLICATION NO.	DAT
<u>FI</u>	<u>WO 2007072032</u>	A2	20070628	<u>WO 2006-GB4877</u>	200
	<u>WO 2007072032</u>	A3	20070907		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, C				
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, G				
	GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, K				
	KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, M				
	MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, P				
	RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, T				
	TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, H				
	IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, B				
	CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, B				
	GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, A				
	KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	<u>WO 2006067518</u>	A2	20060629	<u>WO 2005-GB5113</u>	200
	<u>WO 2006067518</u>	A3	20061123		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, C				
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, G				
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, K				
	KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, M				

MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, S
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, U
 VN, YU, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, H
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, B
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, B
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, A
 KG, KZ, MD, RU, TJ, TM

<u>AU 2006328153</u>	A1	20070628	<u>AU 2006-328153</u>	200
<u>CA 2634911</u>	A1	20070628	<u>CA 2006-2634911</u>	200
<u>EP 1976556</u>	A2	20081008	<u>EP 2006-831443</u>	200
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, H				
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, T				
<u>JP 2009520491</u>	T	20090528	<u>JP 2008-546628</u>	200
<u>US 20080138357</u>	A1	20080612	<u>US 2007-722690</u>	200
<u>NO 2008002810</u>	A	20080812	<u>NO 2008-2810</u>	200
<u>MX 2008008330</u>	A	20080820	<u>MX 2008-8330</u>	200
<u>KR 2008090447</u>	A	20081008	<u>KR 2008-7017965</u>	200
<u>CN 101370514</u>	A	20090218	<u>CN 2006-80051689</u>	200
<u>US 20090226472</u>	A1	20090910	<u>US 2008-158919</u>	200
<u>PRAI WO 2005-GB5113</u>	A	20051223		
<u>WO 2004-GB5441</u>	A	20041223		
<u>WO 2006-GB4877</u>	W	20061221		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Disclosed are various polypeptides, variants or fragments thereof fusion proteins which are useful as **vaccine** for meningococcal dis The inventors used genetic screening for immunogens (GSI) to scre libraries of insertional mutants of N. meningitidis for strains w less susceptible to killing by **bactericidal** antibodies. GSI was screen a library of approx. 40,000 insertional mutants of MC58, a serogroup B isolate of N. meningitidis, with known complete genom sequence. Using this methodol. 14 new sequences were identified.

L8 ANSWER 8 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 8

Full Text	Citing References
AN 148:314817 CA	
TI The potency of the adjuvant, CpG oligos, is enhanced by encapsula PLG microparticles	
AU Malyala, Padma; Chesko, James; Ugozzoli, Mildred; Goodsell, Amand Fengmin; Vajdy, Michael; O'Hagan, Derek T.; Singh, Manmohan	
CS Novartis Vaccines and Diagnostics, Emeryville, CA, 94608, USA	
SO Journal of Pharmaceutical Sciences (2007), Volume Date 2008, 97(3 1155-1164	
CODEN: JFMSAE; ISSN: 0022-3549	
PB Wiley-Liss, Inc.	
DT Journal	
LA English	
AB The objective of this work was to evaluate the potency of the CpG oligonucleotide encapsulated within poly(lactide-co-glycolide), a coadministered with antigen adsorbed to poly(lactide-co-glycolide microparticles (PLG particles). The formulations evaluated inclu added in sol. form, CpG adsorbed, and CpG encapsulated. The anti from Neisseria meningitidis serotype B (Men B) was used in these	

studies. The immunogenicity of these formulations was evaluated Poly(lactide-co-glycolide) microparticles were synthesized by a w emulsification method in the presence of a charged surfactant for formulations. Neisseria meningitidis B protein was adsorbed to t microparticles, with binding efficiency and initial release measu was either added in the sol. or adsorbed or encapsulated form bas type of formulation. The binding efficiency, loading, integrity initial release of CpG and the antigen were measured from all the formulations. The formulations were then tested in mice for thei to elicit antibodies, **bactericidal** activity and T cell responses. Encapsulating CpG within PLG microparticles induced statistically significant higher antibody, **bactericidal** activity and T cell res when compared to the traditional method of delivering CpG in the form.

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITI
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 9

Full Text	Citing References
-----------	-------------------

AN 141:37593 CA
TI Multiple variants of meningococcal protein NMB1870
IN Comanducci, Maurizio; Pizza, Mariagrazia
PA Chiron S.r.l., Italy
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DAT
-----	-----	-----	-----	-----
<u>WO 2004048404</u>	A2	20040610	<u>WO 2003-IB6320</u>	200
<u>WO 2004048404</u>	A3	20040916		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, C			
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, G			
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, K			
	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, N			
	NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, S			
	TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, Z			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, A			
	BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, D			
	ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, S			
	TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, S			
<u>CA 2507009</u>	A1	20040610	<u>CA 2003-2507009</u>	200
<u>AU 2003288681</u>	A1	20040618	<u>AU 2003-288681</u>	200
<u>AU 2003288681</u>	B2	20090604		
<u>EP 1562983</u>	A2	20050817	<u>EP 2003-780528</u>	200
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, M			
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, S			
<u>BR 2003016501</u>	A	20051004	<u>BR 2003-16501</u>	200
<u>CN 1732183</u>	A	20060208	<u>CN 2003-80107687</u>	200
<u>CN 100381464</u>	C	20080416		
<u>JP 2006521782</u>	T	20060928	<u>JP 2004-554854</u>	200

NZ	540206	A	20061222	NZ	2003-540206	200
RU	2336091	C2	20081020	RU	2005-119640	200
MX	2005005442	A	20050826	MX	2005-5442	200
US	20060251670	A1	20061109	US	2005-536215	200
HK	1088342	A1	20090327	HK	2006-108816	200
JP	2010162038	A	20100729	JP	2010-59915	201
PRAI	GB 2002-27346	A	20021122			
	JP 2004-554854	A3	20031121			
	WO 2003-IB6320	W	20031121			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The authors disclose that the NMB1870 protein is an effective ant eliciting anti-meningococcal antibody responses and that it is ex across all meningococcal serogroups. Forty-two different NMB 187 sequences have been identified, and these group into three varian Serum raised against a given variant is **bactericidal** within the s variant group, but is not active against strains which express on other two variants i.e. there is intra-variant cross-protection, inter-variant cross-protection. For max. cross-strain efficacy, therefore, the invention uses mixts. comprising different variant 1870.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITI
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 10

Full Text	Cited Reference
AN 140:362993	CA
TI Sequences of <i>Neisseria meningitidis</i> group B antigens and use for making vaccines for broad protection against hypervirulent mening lineages	
IN Pizza, Mariagrazia	
PA Chiron Srl, Italy	
SO PCT Int. Appl., 53 pp.	
	CODEN: PIXXD2
DT Patent	
LA English	
FAN.CNT 1	

AN 140:362993 CA
TI Sequences of *Neisseria meningitidis* group B antigens and use for making vaccines for broad protection against hypervirulent mening lineages
IN Pizza, Mariagrazia
PA Chiron Srl, Italy
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DAT
-----	----	-----	-----	---
PI WO 2004032958	A1	20040422	WO 2003-IB4848	200
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, C			
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, G			
	GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, L			
	LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, N			
	OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, T			
	TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, A			
	KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, E			
	FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, S			
	BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, T			
CA 2501812	A1	20040422	CA 2003-2501812	200
AU 2003274511	A1	20040504	AU 2003-274511	200
AU 2003274511	B2	20090604		

EP 1549338	A1	20050706	EP 2003-758486	200
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, M				
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, S				
BR 2003015228	A	20060411	BR 2003-15228	200
JP 2006512402	T	20060413	JP 2005-501008	200
CN 1809380	A	20060726	CN 2003-80105896	200
NZ 562998	A	20080530	NZ 2003-562998	200
RU 2333007	C2	20080910	RU 2005-114366	200
MX 2005003863	A	20050908	MX 2005-3863	200
US 20060171957	A1	20060803	US 2006-530753	200
JP 2010215628	A	20100930	JP 2010-89061	201
PRAI GB 2002-23741	A	20021011		
GB 2003-5831	A	20030313		
GB 2003-9115	A	20030422		
JP 2005-501008	A3	20031002		
WO 2003-1B4848	W	20031002		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A small no. of defined antigens can provide broad protection against meningococcal infection, and the invention provides a composition which administration to a subject, is able to induce an antibody response that subject, wherein the antibody response is **bactericidal** against three or more of hypervirulent lineages A4, ET 5 and lineage 3 of N.meningitidis serogroup B. Rather than consisting of a single antigen the composition comprises a mixture of 10 or fewer purified antigens, and does not include complex or undefined mixtures of antigens such as outer vesicles. Five protein antigens are used in particular: (1) a 'N protein'; (2) a '741' protein; (3) a '936' protein; (4) a '953' protein and (5) a '287' protein.

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITI
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 11

	Full Text	Citing Reference
AN	142:21974	CA
TI	Development of immunity to serogroup B meningococci during carriage of <i>Neisseria meningitidis</i> in a cohort of university students	
AU	Jordens, J. Zoe; Williams, Jeannette N.; Jones, Graeme R.; Christodoulides, Myron; Heckels, John E.	
CS	Molecular Microbiology and Infection Group, Division of Infection Inflammation and Repair, University of Southampton Medical School Southampton, UK	
SO	Infection and Immunity (2004), 72(11), 6503-6510 CODEN: INFIBR; ISSN: 0019-9567	
PB	American Society for Microbiology	
DT	Journal	
LA	English	
AB	Understanding the basis of protective immunity is a key requirement for the development of an effective vaccine against infection with <i>Neisseria meningitidis</i> of serogroup B. The authors have conducted a longitudinal study into the dynamics of meningococcal acquisition and carriage in first-year university students. The detection of carriage of serogroup B meningococci correlated with an increase in detection of serum	

bactericidal activity (SBA) against both colonizing and heterolog serogroup B strains. Once induced, SBA remained high throughout study. Although students showed increases in antibodies reactive capsular polysaccharide and lipopolysaccharide (LPS), these antib responses were transitory, and their decline was not accompanied corresponding decline in SBA. In contrast, there was a significant correlation between the presence of antibodies to the PorA outer protein and SBA against both homologous and heterologous strains. induced by a PorA-neg. mutant confirmed the contribution of PorA heterologous activity. Increases in SBA against a range of serog strains were also obsd. in students in whom no meningococcal carr detected. This heterologous protection could not be assocd. with presence of antibodies reacting with capsule, LPS, PorA, PorB, Rm Opc, or pilin, demonstrating that other, as yet unidentified, ant contribute to the development of immunity to serogroup B meningoc Identification of such antigens with the ability to induce an eff cross-reactive **bactericidal** response to a range of strains would major step in the prodn. of a universally effective **vaccine** again infections caused by serogroup B meningococci.

OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CI
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 12

Full Text	Citing References
--------------	----------------------

AN 140:373626 CA
TI Protective Activity of Monoclonal Antibodies to Genome-Derived Ne
Antigen 1870, a Neisseria meningitidis Candidate Vaccine
AU Welsch, Jo Anne; Rossi, Raffaella; Comanducci, Maurizio; Granoff,
CS Children's Hospital Oakland Research Institute, Oakland, CA, 9460
SO Journal of Immunology (2004), 172(9), 5606-5615
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Genome-derived neisserial Ag (GNA) 1870 is a meningococcal **vaccin**
candidate that can be subdivided into three variants based on ami
sequence variability. Variant group 1 accounts for ~60% of
disease-producing group B isolates. The Ag went unrecognized unt
discovery by genome mining because it is expressed in low copy no
strains. To investigate the relationship between Ab binding to G
and complement-mediated protective functions, we prepd. a panel o
murine IgG mAbs against rGNA1870 (variant 1) and evaluated their
against nine genetically diverse encapsulated Neisseria meningiti
strains expressing subvariants of variant 1 GNA1870. Based on fl
cytometry with live encapsulated bacteria, surface accessibility
epitopes recognized by the mAbs appeared to be low in most strain
mAb concns. <1 to 5 µg/mL were sufficient to elicit **bactericidal**
activity with human complement and/or activate C3b deposition on
bacterial surface. Certain combinations of mAbs were highly
bactericidal against strains that were resistant to **bactericidal**
activity of the resp. individual mAbs. The mAbs conferred passiv
protection against bacteremia in infant rats challenged by strain

resistant to bacteriolysis, and the protective activity paralleled ability of the mAb to activate C3b deposition. Thus, despite low surface exposure, anti-GNA1870 variant 1 Abs are **bactericidal** and elicit C3b deposition and confer protection against bacteremia caused by encapsulated *N. meningitidis* strains expressing GNA1870 subvariant proteins. The data support GNA1870 as a promising **vaccine** candidate for prevention of meningococcal group B disease caused by GNA1870 variant strains.

OSC.G 47 THERE ARE 47 CAPLUS RECORDS THAT CITE THIS RECORD (47 CITED)
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 13

Full Text	Cited References
--------------	---------------------

AN 140:75593 CA

TI Liposomal meningococcal B vaccination: Role of dendritic cell targeting in the development of a protective immune response

AU Arigita, Carmen; Bevaart, Lisette; Everse, Linda A.; Koning, Gerb
Hennink, Wim E.; Crommelin, Daan J. A.; van de Winkel, Jan G. J.;
Vugt, Martine J.; Kersten, Gideon F. A.; Jiskoot, Wim

CS Department of Pharmaceuticals, Utrecht Institute for Pharmaceutical
(UIPS), Utrecht University, Utrecht, Neth.

SO Infection and Immunity (2003), 71(9), 5210-5218

CODEN: INFIBR; ISSN: 0019-9567

PB American Society for Microbiology

DT Journal

LA English

AB The effect of targeting strategies for improving the interaction of liposomal PorA with dendritic cells (DC) on the immunogenicity of investigated. PorA, a major **antigen** of *Neisseria meningitidis*, was purified and reconstituted in different types of (targeted) liposomes i.e., by using mannose or phosphatidylserine as targeting moiety with pos. charged liposomes. The authors studied the efficiency of liposome uptake and its effect on the maturation of and interleukin (IL-12) production by murine DC. Moreover, mice were immunized s.c. with the localization and immunogenicity of PorA liposomes. Uptake of liposomes by DC was increased for targeted liposomes and resulted in maturation of DC, but to various degrees. Maturation markers (i.e. CD86, MHC class II, and CD40) showed enhanced expression on DC in with targeted PorA liposomes relative to those incubated with non-targeted PorA liposomes. Moreover, only the uptake of targeted PorA liposomes induced production of IL-12 by DC, with levels similar to those produced by lipopolysaccharide (LPS)-pulsed DC. Mannose-targeted PorA liposomes administered s.c. had an increased localization in draining lymph nodes compared to non-targeted PorA liposomes. Liposomes in draining lymph nodes interacted preferentially with antigen-presenting cells, and that was enhanced with targeted PorA liposomes. Immunization thus showed an improvement of the **bactericidal** antibody response (i.e. increased no. of responders) generated by targeted PorA liposomes to that generated by non-targeted ones or LPS-containing outer membrane vesicles. Thus, the use of targeted PorA liposomes results in an uptake by and activation of DC and an increased localization in draining lymph nodes. These effects correlate with an enhanced immune response.

toward the **vaccine**.

OSC.G 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (24 CI
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 29 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rig

	Full Text	Citing References
	reserved on STN	DUPLICATE 14
AN	2004003955 EMBASE	
TI	Antibody to Genome-Derived Neisserial Antigen 2132, a Neisseria meningitidis Candidate Vaccine , Confers Protection against Bacter the Absence of Complement-Mediated Bactericidal Activity.	
AU	Welsch, Jo Anne; Moe, Gregory R.; Rossi, Raffaella; Granoff, Dan (correspondence)	
CS	Children's Hosp. Oakland Res. Inst., Oakland, CA, United States. dgranoff@chori.org	
AU	Adu-Bobie, Jeannette; Rappuoli, Rino	
CS	Immunobiological Res. Inst. of Siena, Chiron S.r.l., Siena, Italy	
AU	Granoff, Dan M., Dr. (correspondence)	
CS	Children's Hospital, Oakland Research Institute, 5700 Martin Luth Jr. Way, Oakland, CA 94609, United States. dgranoff@chori.org	
SO	Journal of Infectious Diseases, (1 Dec 2003) Vol. 188, No. 11, pp 1730-1740. Refs: 33 ISSN: 0022-1899 CODEN: JIDIAQ	
CY	United States	
DT	Journal; Article	
FS	026 Immunology, Serology and Transplantation 004 Microbiology: Bacteriology, Mycology, Parasitology and Vi	
LA	English	
SL	English	
ED	Entered STN: 16 Jan 2004 Last Updated on STN: 16 Jan 2004	
AB	Genome-derived neisserial antigen 2132 (GNA2132) is a novel vacci candidate that was identified during the Neisseria meningitidis g B strain MC58 genome-sequencing project. To assess the vaccine potential of GNA2132, we prepared antisera from mice immunized wi recombinant GNA2132 (gene from strain NZ394/ 98). Anti-GNA2132 a bound to the surface of live bacteria from all 7 capsular group B strains tested and elicited deposition of human C3b on the bacter surface. However, with human or infant-rat complement, anti-GNA2 no detectable bactericidal activity (titer, <1:4) against the nom strain, NZ394/98, and was bactericidal against only 2 of the othe strains tested. These differences between strains were unrelated GNA2132 amino acid sequence or level of protein expression. Desp of bactericidal activity, anti-GNA2132 antiserum passively protec infant rats against meningococcal bacteremia after challenge with resistant strains. GNA2132 is thus a promising vaccine candidate prevention of disease caused by N. meningitidis.	

L8 ANSWER 15 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 15

Full Text	Citing References

AN 139:51298 CA
 TI Serological correlates of protection against meningococci in a co
 university students, before and during an outbreak of serogroup C
 infection
 AU Williams, Jeannette N.; Jones, Graeme R.; Christodoulides, Myron;
 John E.
 CS Molecular Microbiology and Infection Group, University of Southam
 Medical School, Southampton, UK
 SO Journal of Infectious Diseases (2003), 187(9), 1433-1441
 CODEN: JIDIAQ; ISSN: 0022-1899
 PB University of Chicago Press
 DT Journal
 LA English
 AB The assocn. between individual meningococcal antigens and the dev
 of protective immunity to both serogroup C and B meningococci was
 before and during an outbreak of serogroup C infection among univ
 students. Persons who became infected showed, in serum taken eit
 before infection or on admission to the hospital, low levels of
bactericidal activity against the outbreak strain; patients who s
 infection developed **bactericidal** activity that correlated with pr
 antibodies to serogroup C capsular polysaccharide but not to eith
 lipopolysaccharide or major outer-membrane proteins. Uninfected
 classmates also showed a strong correlation between **bactericidal**
 activity and the presence of anti-capsular antibodies. In contra
bactericidal activity against serogroup B did not correlate with
 presence of antibodies to capsular polysaccharide but did correla
 antibodies reacting with the porin proteins PorA and PorB. These
 support the introduction of conjugate MenC vaccines, validate str
 for prevention of serogroup B infection that are based on vaccine
 PorA, and suggest that PorB may also be an important component of
 vaccines.

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITI
 RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 16

Full Text	Citing References
--------------	----------------------

AN	139:349440 CA
TI	Immune response to native NadA from Neisseria meningitidis and it expression in clinical isolates in Brazil
AU	Fukasawa, Lucila O.; Gorla, Maria Cecilia O.; Lemos, Ana Paula S. Schenkman, Rocilda P. F.; Brandileone, Maria Cristina C.; Fox, Ja Raw, Isaías; Frasc, Carl E.; Tanizaki, Martha M.
CS	Centro de Biotecnologia, Instituto Butantan, Sao Paulo, 05504-900
SO	Journal of Medical Microbiology (2003), 52(2), 121-125 CODEN: JMMIAV; ISSN: 0022-2615
PB	Lippincott Williams & Wilkins
DT	Journal
LA	English
AB	A mAb against the NadA protein from Neisseria meningitidis strain (serosubtype B:2b:P1.2:P5.2,8) demonstrated strong bactericidal a against Brazilian epidemic serogroup B strain N44/89 (B:4,7:P1.19,15:P5.5,7) and a serogroup C strain, IMC 2135 (C:2a:

but not against another serogroup C strain, N1002/90 (C:2b:P1.3:P The immunogenicity of native NadA in an outer-membrane vesicle (O prepn. was also tested. Serum from mice immunized with OMV from B strain N44/89, which contains the NadA protein, showed **bacteric** activity against serogroup B and C strains possessing NadA. In d anal. of 100 serogroup B and 100 serogroup C isolates from Brazil patients, the mAb to NadA recognized about 60 % of the samples fr serogroups. The mol. mass of the NadA protein from strain N44/89 mass spectrometry was 37 971 Da and the peptide sequences were id to those of NadA from N. meningitidis strain MC58.

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITI
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 17 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 17

Full Text	Cited References
AN 136:133267 CA	
TI A novel mimetic antigen eliciting protective antibody to Neisseri meningitidis	
AU Granoff, Dan M.; Moe, Gregory R.; Giuliani, Marzia M.; Adu-Bobie, Jeannette; Santini, Laura; Brunelli, Brunella; Piccinetti, France Zuno-Mitchell, Patricia; Lee, Sharon S.; Neri, Paolo; Bracci, Lui Lozzi, Luisa; Rappuoli, Rino	
CS Children's Hospital Oakland Research Institute, Oakland, CA, 9460	
SO Journal of Immunology (2001), 167(11), 6487-6496	
CODEN: JOIMA3; ISSN: 0022-1767	
PB American Association of Immunologists	
DT Journal	
LA English	
AB Mol. mimetic Ags are of considerable interest as vaccine candidat	

Yet there are few examples of mimetic Ags that elicit protective against a pathogen, and the functional activity of anti-mimetic A not been studied in detail. As part of the Neisseria meningitidi serogroup B genome sequencing project, a large no. of novel prote identified. Herein, we provide evidence that genome-derived Ag 3 (GNA33), a lipoprotein with homol. to Escherichia coli murein transglycosylase, elicits protective Ab to meningococci as a resu mimicking an epitope on loop 4 of porin A (PorA) in strains with serosubtype P1.2. Epitope mapping of a **bactericidal** anti-GNA33 m using overlapping peptides shows that the mAb recognizes peptides GNA33 and PorA that share a QTP sequence that is necessary but no sufficient for binding. By flow cytometry, mouse antisera prepd. rGNA33 and the anti-GNA33 mAb bind as well as an anti-PorA P1.2 m surface of eight of nine N. meningitidis serogroup B strains test the P1.2 serosubtype. Anti-GNA33 Abs also are **bactericidal** for m P1.2 strains and, for susceptible strains, the activity of an ant mAb is similar to that of an anticapsular mAb but less active tha anti-P1.2 mAb. Anti-GNA Abs also confer passive protection again bacteremia in infant rats challenged with P1.2 strains. Thus, GN represents one of the most effective immunogenic mimetics yet des These results demonstrate that mol. mimetics have potential as meningococcal **vaccine** candidates.

OSC.G 38 THERE ARE 38 CAPLUS RECORDS THAT CITE THIS RECORD (38 CI

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 18

Full Text	Citing References
--------------	----------------------

AN 123:141117 CA

OREF 123:25093a,25096a

TI A linear B-cell epitope on the class 3 outer-membrane protein of **Neisseria meningitidis** recognized after vaccination with the Norw **group B** outer-membrane vesicle **vaccine**

AU Delvig, Alexei A.; Wedege, Elisabeth; Caugant, Dominique a.; Dals Kolberg, Jan; Achtman, Mark; Rosenqvist, Einar

CS National Institute of Public Health, Departments of Vaccines and Bacteriology, Oslo, N-0462, Norway

SO Microbiology (Reading, United Kingdom) (1995), 141(7), 1593-600
CODEN: MROBEO; ISSN: 1350-0872

PB Society for General Microbiology

DT Journal

LA English

AB The class 3 outer-membrane protein (OMP) of *Neisseria meningitidis* potential target for **bactericidal** and opsonic antibodies in human Synthetic peptides spanning the class 3 OMP from the **vaccine** str 44/76 (B:15:P1.7,16:L3,7) were synthesized on pins and screened w obtained from Norwegian adolescents immunized with a meningococcal serogroup B outer-membrane vesicle (OMV) **vaccine**. A strong IgG r to a single peptide (19FHQNGQVTEVTT30) located within loop 1 (VR1 stimulated after three doses of OMV **vaccine** in three vaccinees se on the basis of their antibody response to class 3 OMP. No clear B-cell epitopes were recognized by four different murine serotype 15-specific mAbs. A 23mer peptide (D63b2) contg. loop 1 of the c OMP was synthesized, and the IgG responses were measured in pre- post-vaccination serum from 27 vaccinees. Specific IgG rose sign in 37% of vaccines 6 wk after the second dose and in 74% of the v 6 wk after the third dose of the OMV **vaccine**. Most immune sera r distinctly on immunoblots with denatured class 3 OMP, and the immunoblotting reactivity correlated strongly with concn. of the antibodies specific for peptide D63b2. When added to a post-vacc serum from one vaccinee, peptide D63b2 competed efficiently with 3 OMP for specific antibody binding on immunoblots and in pin ELI results show that the significant part of the humoral response to meningococcal class 3 OMP elicited by vaccination with the Norweg **vaccine** was directed against a single continuous epitope.

OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CI

L8 ANSWER 19 OF 29 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rig

Full Text	Citing References
--------------	----------------------

reserved on STN

DUPLICATE 19

AN 1995240219 EMBASE

TI Surface **antigen** analysis of **group B Neisseria meningitidis** outer membrane by monoclonal antibodies: Identification of **bactericidal** antibodies to class 5 protein.

AU Danelli, M.D.G.M. (correspondence); Batoreu, N.M.; Lacerda, M.D.;

Ferreira, C.R.B.; Cardoso, J.D.; Peralta, J.M.; Frascch, C.E.
 CS Depto. Desenvolvimento Tecnológico, Fundacao Oswaldo Cruz, Insto.
 Tecnologia Immunobiologicos, Av. Brasil 4365, Rio de Janeiro, 210
 RJ, Brazil.
 SO Current Microbiology, (1995) Vol. 31, No. 3, pp. 146-151.
 ISSN: 0343-8651 CODEN: CUMIDD
 CY United States
 DT Journal; Article
 FS 004 Microbiology: Bacteriology, Mycology, Parasitology and Vi
 LA English
 SL English
 ED Entered STN: 30 Aug 1995
 Last Updated on STN: 30 Aug 1995
 AB Twenty-four monoclonal antibodies (mAbs) against **group B Neisseri**
meningitidis surface **antigens** were analyzed by immunoenzymatic as
 and by a **bactericidal** test. Two mAbs were specific to polysaccha
 and one to lipopolysaccharide. The others were directed against
 membrane proteins ranging in molecular mass from 25 to 200 kDa.
 membrane protein epitopes recognized by the mAbs were not conform
 and were located on the outer surface of the microorganism. Line
 epitopes on the class 5 protein, exposed on the surface of the me
 were able to induce **bactericidal** antibodies to the homologous str
 The susceptibility of *Neisseria meningitidis* to these antibodies
 unchanged when this organism was cultivated under conditions of i
 depletion. These results demonstrate that peptides derived from
 proteins are potentially important in synthetic peptide or in rec
 protein vaccines containing linear **bactericidal** epitopes.

L8 ANSWER 20 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 20

Full Text	Citing References
--------------	----------------------

AN 122:7450 CA

OREF 122:1719a,1722a

TI Immunization with a multiple antigen peptide containing defined B
 T-cell epitopes: production of **bactericidal** antibodies against **gr**
B Neisseria meningitidis

AU Christodoulides, Myron; Heckels, John E.

CS Southampton General Hospital, Univ. Southampton, Southampton, SO1

SO Microbiology (Reading, United Kingdom) (1994), 140(11), 2951-60

CODEN: MROBEO; ISSN: 1350-0872

PB Society for General Microbiology

DT Journal

LA English

AB Previous anal. of the class 1 outer-membrane (OM) protein of *Neis*
meningitidis has identified discrete epitopes to be potential tar
 immune attack. The conformation of these epitopes is important f
 inducing antibodies which can react with the native protein and p
 complement-mediated lysis of the meningococcus. The multiple ant
 peptide (MAP) system, which consists of an oligomeric branching l
 core to which are attached dendritic arms of defined peptide anti
 confers some conformational stability and also allows for the pre
 immunogens contg. both B-cell and T helper (Th)-cell epitopes. I
 study, MAPs were synthesized to contain (i) the subtype Pl.16b
 meningococcal class 1 protein B-cell epitope (B-MAP), and (ii) th

epitope in tandem with a defined Th-cell epitope, chosen from tet toxin (BT-MAP). The B-MAP was non-immunogenic in animals. In co incorporation of the Th-cell epitope into BT-MAP induced a strong response towards the class I protein B-cell epitope. Antisera from immunized mice and rabbits reacted in ELISA with synthetic peptide the B-cell epitope, and also cross-reacted with meningococcal OMS strains of subtype P1.16b and P1.16a. Murine and rabbit antisera similar reactivity and epitope specificity, but did not react with denatured class I protein in Western blotting, indicating the presence of antibodies directed towards conformational epitopes. The anti rabbits immunized with BT-MAP promoted complement-mediated **bacter** killing not only of the homologous meningococcal subtype P1.16b but also of subtype P1.16a.

OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITE

L8 ANSWER 21 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 21

Full Text	Citing References
AN 113:4319 CA	
OREF 113:879a,882a	
TI Antibodies to meningococcal H.8 (Lip) antigen fail to show bacter activity	
AU Bhattacharjee, Apurba K.; Moran, Elizabeth E.; Zollinger, Wendell	
CS Dep. Bact. Dis., Walter Reed Army Inst. Res., Washington, DC, 203 USA	
SO Canadian Journal of Microbiology (1990), 36(2), 117-22	
CODEN: CUMIAZ; ISSN: 0008-4166	
DT Journal	
LA English	
AB Purified H9, (Lip) (for lipoprotein) antigen was coupled to tetracycline-activated Sepharose 4B and used in affinity columns to purify anti-Lip antibodies from convalescent patient sera and from immun sera. Affinity-purified anti-Lip antibodies isolated from two convalescent patient sera contained 1000 and 1280 ELISA units of and included antibodies of IgG, IgA, and IgM isotypes. An anti-Lip monoclonal ascites (2-1-CA2) had 28 400 ELISA units of antibody. Bactericidal assays were performed using three different case strains of <i>Neisseria meningitidis</i> group B, namely 44/76, 8532, and 8047. Neither prepurified of purified human anti-Lip antibodies had detectable bactericidal activity against strains 44/76 and 8532, but one of had a titer of 1:4 against strain 8047. Anti-Lip antibodies that purified from immune rabbit serum and contained 1600 ELISA units anti-Lip antibodies also failed to show detectable bactericidal activity. The rabbits were immunized with purified Lip antigen at specific antibody levels of 2000-2200 units by ELISA, but even the unfractionated sera had little or no bactericidal activity against test strains. The high titer mouse monoclonal ascites had no bactericidal activity against the test strains. The poor bactericidal activity associated with monoclonal and polyclonal antibodies to the antigen suggest that in spite of other attractive properties it may be useful as a meningococcal vaccine .	

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITE

L8 ANSWER 22 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 22



AN 111:37527 CA
OREF 111:6389a,6392a

TI Unique intermolecular **bactericidal** epitope involving the homosomal polysaccharide capsule on the cell surface of **group B Neisseria meningitidis** and *Escherichia coli* K1
AU Jennings, Harold J.; Gamian, Andrzej; Michon, Francis; Ashton, Fr
CS Div. Biol. Sci., Natl. Res. Council, Canada, Ottawa, ON, K1A 0R6, C
SO Journal of Immunology (1989), 142(10), 3585-91
CODEN: JOIMA3; ISSN: 0022-1767

DT Journal

LA English

AB The N-propionylated group B meningococcal polysaccharide mimics a **bactericidal** epitope on the surface of group B meningococci and *Escherichia coli* K1. This was confirmed when both the above organs were able to absorb the **bactericidal** antibodies from a mouse-anti-N-propionylated group B meningococcal polysaccharide-toxoid conjugate serum. By using affinity columns it was possible to divide the conjugate antiserum into 3 distinct populations of both polysaccharide cross-reactive and non-cross-reactive antibodies, which contained most of the **bactericidal** activity. The cross-reactive (IgG1) antibodies were absorbed by an affinity column in which the polysaccharide was linked to the solid support by a long spacer thereby isolating a population of non-cross-reactive (IgG1) antibodies. Surprisingly the above column also retained another population of non-cross-reactive (IgG2a) and (IgG2b) antibodies which contained the **bactericidal** activity. These latter antibodies were not absorbed by a similar group B polysaccharide-affinity column in which a short arm was employed. The above experiments thus not only effected a separation of highly **bactericidal** antibodies but also provided evidence that the spacer arm is functional in the binding of the **bactericidal** antibodies to the affinity column. This indicates that the **bactericidal** epitope mimicked by the group B polysaccharide in the presence of the long arm, which supports the hypothesis that the epitope is polysaccharide-associated and is probably internal in nature.

OSC.G 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITE)

L8 ANSWER 23 OF 29 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved



reserved on STN
DUPLICATE 23
AN 1989215755 EMBASE
TI Comparative evaluation of potential components for group B meningococcal **vaccine** by passive protection in the infant rat and in vitro **bactericidal** assay.
AU Saukkonen, K.; Leinonen, M.; Abdillahi, H.; Poolman, J.T.
CS National Public Health Institute, SF-00280 Helsinki, Finland.
SO Vaccine, (1989) Vol. 7, No. 4, pp. 325-328.
ISSN: 0264-410X CODEN: VACCDE
CY United Kingdom
DT Journal
FS 037 Drug Literature Index
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology

LA English
 SL English
 ED Entered STN: 12 Dec 1991
 Last Updated on STN: 12 Dec 1991
 AB Seventeen monoclonal antibodies to one of three main cell surface antigens of *Neisseria meningitidis* group B were tested for protective efficacy in the infant rat using as challenge seven st different class 2/3 protein serotypes, class 1 protein (P1) subty LPS immunotypes. Type-specific protection indicated both by a re of bacteraemia and meningitis and survival of the animals was reg obtained with antibodies to the P1 protein and to LPS. By contra one of seven antibodies to the serotype-specific class 2/3 protei protective, even though four of them were highly **bactericidal**. T animal protection test and in vitro **bactericidal** assay were other concordant. These data form important guidelines for the design vaccines to prevent group B meningococcal infections.

L8 ANSWER 24 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 24

Full Text	Citing References
-----------	-------------------

AN 107:5416 CA

OREF 107:1015a,1018a

TI N-Propionylated group B meningococcal polysaccharide mimics a uni epitope on group B *Neisseria meningitidis*

AU Jennings, Harold J.; Gamian, Andrzej; Ashton, Fraser E.

CS Div. Biol. Sci., Natl. Res. Counc. Canada, Ottawa, ON, K1A 0R6, C

SO Journal of Experimental Medicine (1987), 165(4), 1207-11

CODEN: JEMEAU; ISSN: 0022-1007

DT Journal

LA English

AB Antibodies induced in mice by the N-propionylated group B meningo polysaccharide (N-Pr-GBMP)-tetanus toxoid (TT) conjugate were **bactericidal** for GBM organisms independent of protein serotype. antisera contained 2 populations of N-Pr-GBMP-specific antibodies one of which cross-reacted with the GBMP. Particularly significa the fact that the **bactericidal** activity was mainly assocd. with t antibodies that did not cross-react with the GBMP. Thus, N-Pr-G mimics a unique epitope on the surface of GBM organisms that is n present on the exogenous GBMP.

OSC.G 48 THERE ARE 48 CAPLUS RECORDS THAT CITE THIS RECORD (48 CI

L8 ANSWER 25 OF 29 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporati

Full Text	Citing References
-----------	-------------------

STN

AN 1986:171713 BIOSIS

DN PREV198681082129; BA81:82129

TI HUMAN ANTIBODY RESPONSE TO A GROUP B SEROTYPE 2A MENINGOCOCCAL **VA** DETERMINED BY IMMUNOBLOTTING.

AU WEDEGE E [Reprint author]; FROHOLM L O

CS DEPARTMENT METHODOLOGY, NATIONAL INSTITUTE PUBLIC HEALTH, GEITMYR 75, 0462 OSLO 4, NORWAY

SO Infection and Immunity, (1986) Vol. 51, No. 2, pp. 571-578.

CODEN: INFIBR. ISSN: 0019-9567.

DT Article
 FS BA
 LA ENGLISH
 ED Entered STN: 26 Apr 1986
 Last Updated on STN: 26 Apr 1986
 AB The antibody responses of 30 volunteers vaccinated with a complex **group B** polysaccharide and outer membrane vesicles (OMV) from ser 2a *Neisseria meningitidis* and of 3 individuals who received a **plasma vaccine** was determined by immunoblotting. OMV were separated by dodecyl sulfate-gel electrophoresis and electrotransferred to nitrocellulose filters. Binding of immunoglobulin G (IgG), IgA, antibodies in the human sera to OMV components was detected with class-specific peroxidase-conjugated antibodies. The immunoblotting results were also related to the **bactericidal** activity of the sera of the meningococcal carrier status of the volunteers. Before vaccination weakly reactive bands in the molecular weight range of 140,000 to 220,000 were observed on the blots. Sera from carriers showed more marked individual patterns of increased reactivity were seen 6 weeks after vaccination. The main immunoreactive components of OMV corresponded to molecular weight of 43,000 (class 1 protein), 30,000 (class 5 protein) and 22,000. IgG antibodies in postvaccination sera of high **bacterial** titers showed distinct binding to the 43,000-molecular-weight antigen of *Meningococcal* carriers had antibodies against an antigen of 22,000 molecular weight; in polyacrylamide gels this component did not stain with Coomassie brilliant blue or silver. The marked binding of IgG antibodies to the class 5 proteins decreased considerably between weeks 6 and 12 after vaccination. Periodate oxidation of OMV abolished the binding of IgG antibodies to the class 5 proteins, whereas the antigenicity of the 43,000-molecular-weight (class 1 protein) and 22,000-molecular-weight antigens was unaffected.

L8 ANSWER 26 OF 29 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved

Full Text	Citing References
reserved on STN	DUPLICATE 25
AN 1984113189 EMBASE	
TI Class-specific human bactericidal antibodies to capsular and noncapsular antigens of <i>Neisseria meningitidis</i> .	
AU Skevakis, L.; Frasch, C.E.; Zahradnik, J.M.; Dolin, R.	
CS Office of Biologics, National Center for Drugs and Biologics, US Drug Administration, Bethesda, MD 20205, United States.	
SO Journal of Infectious Diseases, (1984) Vol. 149, No. 3, pp. 387-393. ISSN: 0022-1899 CODEN: JIDIAQ	
CY United States	
DT Journal; Article	
FS 026 Immunology, Serology and Transplantation	
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology	
008 Neurology and Neurosurgery	
LA English	
ED Entered STN: 10 Dec 1991 Last Updated on STN: 10 Dec 1991	
AB Bactericidal and enzyme-linked immunosorbent assays were used to determine the immunoglobulin classes responsible for group- and type-specific immunity to <i>Neisseria meningitidis</i> among healthy,	

unvaccinated individuals and persons who received **group-B N meningitidis polysaccharide-serotype-2 protein vaccine**. **Bactericidal antibodies** to the group B polysaccharide were primarily IgM; only individuals had both IgM and IgG antibodies. IgG **bactericidal antibodies** were detected only in those individuals with high IgM-levels to group B meningococci. Increased levels of **bactericidal antibodies** to the group-B polysaccharide were infrequently found vaccines, possibly because of high prevaccination **bactericidal**-antibody levels. **Bactericidal antibodies** to the group-C polysaccharide were IgG, or both. **Vaccine**-induced antibodies to lipopolysaccharide were **bactericidal** for a group-C serotype-2 strain with the lipopolysaccharide immunotype of the **vaccine** strain.

L8 ANSWER 27 OF 29 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved

Full Text ☒ References ☒

reserved on STN

DUPLICATE 26

AN 1978306724 EMBASE

TI Protection against group B meningococcal disease. III. Immunogenicity of serotype 2 vaccines and specificity of protection in a guinea pig

AU Frisch, C.E.; Robbins, J.D.

CS Bur. Biol., Bethesda, Md. 20014, United States.

SO Journal of Experimental Medicine, (1978) Vol. 147, No. 3, pp. 629-639
ISSN: 0022-1007 CODEN: JEMEA

CY United States

DT Journal; Article

FS 026 Immunology, Serology and Transplantation

004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
008 Neurology and Neurosurgery

LA English

AB Protein vaccines were prepared from the serotype **antigen of group B *Neisseria meningitidis* strain M986**. The detergents Triton X-100, Emulphogene BC-720, and deoxycholate were used to remove the toxic lipopolysaccharide (LPS) portion of the serotype antigen. The LPS was most preferentially solubilized by Emulphogene. Guinea pigs were immunized with one or two doses of **vaccine** given intramuscularly with adjuvants and the antibody response quantitated by an enzyme-linked immunosorbent assay. Immunization with graded doses of **vaccine** from 25 to 200 µg protein indicated a wide range of effective dosage at which a two-dose immunization schedule was superior to a single immunization. The vaccines elicited peak mean serum antibody levels of approximately 30 µg/ml with **bactericidal** titers of 1:1,600-1:6,400. The peak antibody levels occurred 5-6 wk after immunization and were above preimmune levels for several months. To evaluate the protective effects of immunization, stainless steel springs were implanted subcutaneously into the guinea pigs. The resulting chambers, in unimmunized animals, could be infected with less than 100 type 2 organisms. A single 25-50 µg dose of **vaccine** protected 50% of animals from challenge by 5 x 10⁵ type 2 meningococci, and as little as 10 µg **vaccine** significantly reduced the severity of infection. A two-dose immunization schedule was best and provided nearly complete protection for at least 4 mo against type 2 strains of meningococcal groups B, C, and Y.

L8 ANSWER 28 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 27

Full Text	Citing References
AN 81:147147 CA	
OREF 81:22939a,22942a	
TI Protein fraction with immunogenic potential and low toxicity isol the cell wall of Neisseria meningitidis group B	
AU Hill, James C.; Weiss, Emilio	
CS Dep. Microbiol., Nav. Med. Res. Inst., Bethesda, MD, USA	
SO Infection and Immunity (1974), 10(3), 605-15	
CODEN: INFIBR; ISSN: 0019-9567	
DT Journal	
LA English	
AB Several fractions were extd. from the cell envelope (CE) of N. meningitidis group B and characterized with regard to their morph antigenicity, protein compn., and toxicity. Whole bacterial cell suspended in a medium of low ionic strength and disrupted in a Fr pressure cell. The crude CE thus obtained was sepd. into cell me (CM)-enriched and cell wall (CW)-enriched fractions on sucrose gr In addn. CM and CW fractions were sepd. from CE on the basis of differential soly. in Triton X-100. The Triton-insol. fraction, primarily CW components, was further treated with a mixt. of Trit EDTA which removed addnl. protein and most of the lipopolysacchar Electron microscope examn. of the various fractions revealed typi membrane structures in the case of CM, or large, open segments in of CW. The Triton-insol./Triton-EDTA-insol. fractions consisted vesicular structures. All fractions, except the Triton-sol. frac when assayed byNa dodecyl sulfate-polyacrylamide gel electrophore contained 1 major protein component accounting for >50% of the to Sera from rabbits immunized with the various fractions formed pre lines in immunodiffusion tests against the homologous and some of heterologous fractions. High-titer bactericidal antibodies were demonstrated in these sera when tested against the homologous str Toxicity studies in rats sensitized with Pb(OAc)2 indicated that of contamination of Triton-insol./Triton-EDTA-insol. fractions wi lipopolysaccharide was significantly smaller than that of the oth fractions.	

L8 ANSWER 29 OF 29 CA COPYRIGHT 2010 ACS on STN DUPLICATE 28

Full Text	Citing References
AN 78:14329 CA	
OREF 78:2287a,2290a	
TI Classification of Neisseria meningitidis group B into distinct serogroups. IV. Preliminary chemical studies on the nature of t serotype antigen	
AU Frasch, Carl E.; Chapman, S. Stephen	
CS Med. Sch., Univ. Minnesota, Minneapolis, MN, USA	
SO Infection and Immunity (1972), 6(5), 674-81	
CODEN: INFIBR; ISSN: 0019-9567	
DT Journal	
LA English	
AB Group B N. meningitidis has been subdivided into 11 distinct sero a sensitive bactericidal inhibition technique. The antigens resp	

AN 78:14329 CA

OREF 78:2287a,2290a

TI Classification of **Neisseria meningitidis group B** into distinct serogroups. IV. Preliminary chemical studies on the nature of t serotype antigen

AU Frasch, Carl E.; Chapman, S. Stephen

CS Med. Sch., Univ. Minnesota, Minneapolis, MN, USA

SO Infection and Immunity (1972), 6(5), 674-81

CODEN: INFIBR; ISSN: 0019-9567

DT Journal

LA English

AB Group B N. meningitidis has been subdivided into 11 distinct sero a sensitive **bactericidal** inhibition technique. The antigens resp

for induction of **bactericidal** type-specific antibodies were found extractable from the group B cells with heating at 100 either by HCl in saline or by normal saline. These extd. serotype antigens detected by a capillary precipitin test. The development of meth extn. and assay of the serotype antigens permitted studies on the immunochemistry. The serotype antigens were distinct from the group-specific substance. Acid exts. contained abundant serotype but were devoid of group-specific substance. The identity of ser antigens as proteins was confirmed by their sensitivity to Pronas trypsin. The mol. wt. of these antigens as estd. by G-200 Sephad chromatog. and by electrophoresis in polyacrylamide gels is in ex 200,000 daltons. Saline exts. contg. the serotype antigen could fractionated into three distinct fractions with acetic acid: pH 4 3.5 pptd. fractions, and a pH 3.5 supernatant fraction. The pH 4 fraction contained the serotype antigen.

=> d his

(FILE 'HOME' ENTERED AT 16:32:28 ON 15 NOV 2010)

FILE 'EMBASE, MEDLINE, BIOSIS, BIOTECHDS, CA, CABA, CAPLUS, LIFES
SCISEARCH, CONFSCI, AGRICOLA' ENTERED AT 16:33:18 ON 15 NOV 2010

```

L1      24 S NEISSERIA GROUP B
L2      2871 S NEISSERIA (10A) GROUP B
L3      1484 S L2 AND (VACCINE OR BACTERICIDAL OR MICROBICIDAL OR B
L4      620 S L3 AND BACTERICIDAL
L5      0 S L4 AND (MENB919 OR MENB 929)
L6      0 S L4 AND (MENB919 OR MENB 919)
L7      76 S L4 AND NEISSERIA (5A) ANTIGEN?
L8      29 DUP REM L7 (47 DUPLICATES REMOVED)

```

=>